

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1-8. Cancelled

9. (New) In a snow-trail grooming vehicle having a driving chain or track system and a cable assist pulling system having a cable winch, a method for controlling the cable winch comprising the steps of:

detecting a speed of the driving chain;

detecting a speed of the cable;

comparing the detected speed of the driving chain and the detected speed of the cable;

determining a desired value for the speed of the cable and controlling the cable winch to attain the desired value for the speed of the cable.

10. (New) The method of Claim 9, wherein the step of detecting a speed of the driving chain comprises directly detecting the speed of the driving chain

11. (New) The method of Claim 9, wherein the step of detecting a speed of the driving chain comprises detecting a magnitude proportional to the speed of the driving chain.

12. (New) The method of Claim 9, wherein the step of detecting a speed of the cable comprises directly detecting the speed of the cable.

13. (New) The method of Claim 9, wherein the step of detecting a speed of the cable comprises detecting a magnitude proportional to the speed of the cable.

14. (New) The method according to Claim 9, further comprising the step of detecting a pulling force in the cable and controlling the cable winch to maintain the pulling force below a specifiable highest value for the pulling force.

15. (New) The method according to Claim 9, wherein a chain speed and a cable winch speed are detected.

16. (New) The method according to Claim 9, wherein the speed of the cable is detected as a magnitude and a direction relative to a traveling direction of the snow-trail grooming vehicle.

17. (New) The method according to Claim 9, further comprising the step of determining an angle of slope between a traveling direction of the snow-trail grooming vehicle and the horizontal, and a direction of the speed of the cable relative to the traveling direction, for determining the desired value for the speed of the cable.

18. (New) The method according to Claim 9, further comprising the step of determining whether the driving chain of the snow-trail grooming vehicle is slipping, for determining the desired value for the speed of the cable.

19. (New) A method for controlling a cable winch of a snow-trail grooming vehicle, comprising the steps of:

detecting a traveling speed of the snow-trail grooming vehicle over a ground surface according to direction and absolute value;

detecting a speed of a cable wound on the cable winch according to direction and absolute value;

comparing the detected traveling speed and the detected cable speed; and

determining a desired value for the cable speed for controlling the cable winch.

20. (New) A snow-trail grooming vehicle comprising a cable winch, means for detecting at least one of a chain or track speed and a traveling speed of the vehicle over a ground surface, means for detecting a cable speed, means for comparing the detected cable speed and the detected at least one of the chain or track speed and the traveling speed of the vehicle, and means for determining therefrom a desired value for the cable speed.